

## REMARKS

The election/restriction requirement has been carefully reviewed. Initially, a petition and fee for a one-month extension of time is separately submitted.

The Office Action has required restriction to one of the following inventions under 35 U.S.C. 121: (I) Claims 1-10, drawn to a composition described as a "solid resin support having a multifunctional chemical moiety covalently attached thereto", classified variously in class 429, subclass 407; 525, subclass 54.11; (II) Claims 11-14, drawn to a method for covalently attaching a multifunctional chemical moiety to a solid resin support, classified variously in class 585, subclass 424; class 435, DIG 40; and, (III) Claims 15-16, drawn to a method for using the multifunctional chemical moiety-solid resin support composite in a solid phase synthesis process, classified variously in class 435, DIG 49; class 436, subclass 518.

The Office Action stated that the inventions are distinct, each from the other because of the following reasons:

Groups I-III represent separate and patentably distinct inventions. Groups I-III are drawn to different methods and/or products (i.e., e.g., which are directed to different purposes, use different materials, recite different method or process steps for the preparation of different product(s), screening of different characteristics, such as different binding affinities, different biochemical reaction conditions, etc. or lead to different final results). Therefore, the groups that describe these products and methods have different issues regarding patentability and enablement, and represent patentably distinct subject matter, which merits separate and burdensome searches. Art anticipating or rendering obvious each of the above-identified groups respectively would not necessarily anticipate or render obvious another group, because they are drawn to different inventions that have different distinguishing features.

Groups I and II are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different products or

(2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case, the process as claimed (1) can be used to make other and materially different products (e.g., the process can be used to make a library for screening or for making affinity and/or hydrophobic chromatography applications.

Groups I and III are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case, the product as claimed (2) can be used in a materially different process of using that product (e.g., could be used in affinity and/or hydrophobic chromatography).

These inventions have acquired a separate status in the art as shown by their different classification and/or divergent subject matter. The different methods and products would require completely different searches in both the patent and non-patent databases, and there is no expectation that the searches would be coextensive. Therefore, this does create an undue search burden, and restriction for examination purposes as indicated is proper.

Applicants hereby elect Group I, claims 1-10 without traverse.

The Office Action further stated that this application contains claims directed to patentably distinct species of the claimed invention for Groups I-III. Election is required as follows.

As the applicant elected the invention of Group I, applicant was further required to elect from the following patentably distinct species. Claim 1 is generic.

Subgroup 1: Species of solid resin support having a multifunctional chemical moiety covalently attached thereto (e.g, see claim 1) Applicant must elect for purposes of search a single species of solid resin support having a multifunctional chemical moiety covalently attached thereto. Furthermore, applicant must show all atoms and bonds that are necessary to define said solid resin support having a multifunctional chemical moiety covalently attached

thereto (e.g., see figure 2). Applicants must further specify within the structure the trifunctional linker (e.g., see figure 2, element 230), core (e.g., see figure 2, element 105), membrane anchor (e.g., see figure 2, element 110), spacer (e.g., see figure 2, element 130), immobilization linker (e.g., see figure 2, element 220) and support (e.g., see figure 2, element 210). Applicant should NOT use general notations like  $R'$ ,  $R^2$ , etc. when defining the structure because these labels represent more than one chemical group and thus more than one compound would be erroneously elected.

Subgroup 2: Species of reactive arm group (e.g., see claims 3-4)

Applicant must elect for purposes of search a single species of reactive arm group. Furthermore, applicant must show all atoms and bonds that are necessary to define said reactor group (e.g., see figure 2). Applicant should NOT use general notations like  $R'$ ,  $R^2$ , etc. when defining the structure because these labels represent more than one chemical group and thus more than one compound would be erroneously elected. Applicants must also specify any protecting groups thereon (if any).

Subgroup 3: Species of solid-support (see claim 10). Applicant must elect, for the purposes of search, a single species of solid support (e.g., polystyrene).

Applicant elects: (Subgroup 1) the species specifically shown in Fig. 2(b) as the solid resin support having a multifunctional chemical moiety covalently attached thereto; (Subgroup 2) the species of carboxylic acid ( $-\text{COOH}$ ) as the single species of reactive arm group; and (Subgroup 3) the species of polystyrene as the single species of solid support. In Fig. 2(b), the illustrated bead can be polystyrene, the  $\text{C}(\text{C}_6\text{H}_5)_2$  group attached to the polystyrene bead results from derivatization with trityl chloride (see specification at page 11, line 25), the carboxylic acid group in core 105 being the reactive arm group, and the multifunctional chemical moiety covalently attached thereto being the  $-\text{N}(\text{H})-\text{CH}(\text{COOH})-\text{CH}_2-\text{CH}_2-\text{C}(\text{O})-\text{N}(\text{C}_{18}\text{H}_{37})_2$  of Fig. 2(b).

The Office Action further noted that the applicants must disclose which claims read on the elected species.

Applicant submits that the claims that read on the elected species includes Claims 1, 2, 3, 4, 6, 8 and 10.

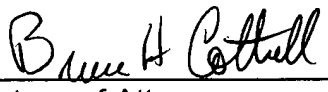
SN 10/629,984  
Docket No. S-100,648  
In Response to Office Action dated November 3, 2004

The Office Action noted that upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, application must indicate which are readable upon the elected species.

A favorable action is solicited.

Respectfully submitted,

Date: 12/21/2004

  
\_\_\_\_\_  
Signature of Attorney

Reg. No. 30,620  
Phone (505) 667-9168

Bruce H. Cottrell  
Los Alamos National Laboratory  
LC/IP, MS A187  
Los Alamos, New Mexico 87545